

## POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST AND REVOCATION OF PRIOR POWERS

## **RECEIVED**

Honorable Commissioner of Patents and Trademarks P.O. Box 1450 Alexandria, VA 22313-1450

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Technology Center 2100

Sir:

As assignee of record of the entire right, title, and interest, the undersigned corporation hereby revokes all previous powers of attorney and appoints the attorneys and/or agents of Staas & Halsey LLP, under USPTO customer No. 21,171, to prosecute and transact all business in the U.S. Patent and Trademark Office for the following listed patent applications:

| DOCKET NO. | SERIAL NO.  | FILING DATE       | Inventor(s)                | TITLE   |  |
|------------|-------------|-------------------|----------------------------|---|--|
| 1761.1001  | 09/944,589  | September 4, 2001 | Takayuki NORIMATSU         | WHEEL BEARING<br>ASSEMBLY   |  |
| 1761.1002  | 09/993,715) | November 27, 2001 | Yoshihisa KUDO, et al.     | WORKSHOP FACILITY DESIGN AND OPERATION SUPPORT SYSTEM ENABLING VERIFICATION OF THE ENTIRE WORKSHOP TO BE PERFORMED EASILY |  |
| 1761.1003  | 10/300,902  | November 21, 2002 | Kazuyoshi HARIMOTO, et al. | CONNECTING ROD AND BEARING- EQUIPPED CONNECTING ROD   |  |
| 1761.1004  | 09/880,931  | June 15, 2001     | Yasuhiro GOTOU, et al.     | MACHINE COMPONENT<br>MONITORING,<br>DIAGNOSING AND<br>SELLING SYSTEM  |  |
| 1761.1005  | 09/995,678  | November 29, 2001 | Takashi HOSOYA, et al.     | CONSTANT VELOCITY<br>UNIVERSAL JOINT  |  |
| 1761.1006  | 10/387,563  | March 14, 2003    | Yoshio FUJIKAWA, et al.    | BEARING ASSEMBLY EQUIPPED WITH ROTATION SENSOR CAPABLE OF DETECTING HOME POSITION   |  |
| 1761.1007  | 10/377,755  | March 4, 2003     | Kenichi IWAMOTO, et al.    | BEARING ASSEMBLY<br>WITH ELECTRIC<br>POWER GENERATOR  |  |
| 1761.1008  | 10/382,505  | March 7, 2003     | Masatoshi MIZUTANI, et al. | ROTATION DETECTING DEVICE AND WHEEL SUPPORT BEARING ASSEMBLY USING THE SAME   |  |

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|------------|------------|--------------------|--|---|--|
| 1761.1009  | 10/299,836 | November 20, 2002  | Katsufumi ABE  | ROCKER ARM  |  |
| 1761.1010  | 10/059,249 | January 31, 2002   | Masatoshi NIINA  | SHELL TYPE ROLLER   |  |
|            | 10/000,210 |                    | Wide a construction of the | BEARING ASSEMBLY  |  |
| 1761.1011  | 10/098,369 | March 18, 2002     | Yasuaki TAKAHASHI, et al.  | CAGED ROLLER ASSEMBLY AND REDUCTION GEAR UNIT USING THE SAME                            |  |
| 1761.1012  | 10/634,762 | August 3, 2003     | Masahiko KATAOKA, et al.   | ROCKER ARM  |  |
| 1761.1013  | 10/382,656 | March 7, 2003      | Toru TAKAHASHI, et al.   | ROTATION DETECTING<br>DEVICE AND ANTI-SKID<br>BRAKING SYSTEM<br>USING THE SAME          |  |
| 1761.1014  | 10/377,757 | March 4, 2003      | Hidehiko NISHIJIMA, et al.   | FOIL BEARING AND<br>SPINDLE DEVICE<br>USING THE SAME                                    |  |
| 1761.1015  | 10/090,752 | March 6, 2002      | Hisashi OHTSUKI, et al.  | WHEEL SUPPORT<br>BEARING ASSEMBLY   |  |
| 1761.1016  | 09/972,949 | October 10, 2001   | Ryutaro OKA  | BEARING ASSEMBLY<br>WITH TEMPERATURE<br>SENSOR  |  |
| 1761.1017  | 10/321,553 | December 18, 2002  | Takashi KOIKE, et al.  | SENSOR-EQUIPPED BEARING ASSEMBLY AND MOTOR USING THE SAME                               |  |
| 1761.1018  | 10/251,800 | September 23, 2002 | Tatsuo NAKAJIMA  | MAGNETIC ENCODER<br>AND WHEEL BEARING<br>ASSEMBLY USING THE:<br>SAME                    |  |
| 1761.1019  | 10/091,579 | March 7, 2002      | Koichi OKADA, et al.   | WHEEL SUPPORT<br>BEARING ASSEMBLY   |  |
| 1761.1020  | 10/013,552 | December 13, 2001  | Takashi NOZAKI, et al.   | WHEEL SUPPORT ASSEMBLY FOR TRANSMITTING A DRIVE FORCE FROM AN ELECTRIC MOTOR TO A WHEEL |  |
| 1761.1021  | 09/709,390 | November 13, 2000  | Hisashi OHTSUKI, et al.  | WHEEL BEARING AND<br>SEALING DEVICE<br>THEREFOR   |  |
| 1761.1021D | 10/607,198 | June 27, 2003      | Hisashi OHTSUKI, et al.  | WHEEL BEARING AND<br>SEALING DEVICE<br>THEREFOR   |  |
| 1761.1022  | 10/185,015 | July 1, 2002       | Kanji NAKAMURA, et al.   | GRINDING SLUDGE<br>COMPACTING<br>MACHINE  |  |
| 1761.1023  | 10/244,472 | September 17, 2002 | Takayuki NORIMATSU   | MAGNETIC ENCODER<br>AND WHEEL BEARING<br>ASSEMBLY USING THE<br>SAME                     |  |
| 1761.1024  | 09/989,458 | November 21, 2001  | Isamu YOSHIDA, et al.  | POWERED STEERING DEVICE AND BALL SCREW MECHANISM THEREFOR                               |  |

| DOCKET NO. | SERIAL NO. | FILING DATE        | Inventor(s)             | TITLE  |
|------------|------------|--------------------|-------------------------|--|
| 1761.1025  | 09/835,390 | April 17, 2001     | Shoji ITOMI             | ROTATIONAL ANGLE<br>SENSOR ASSEMBLY  |
| 1761.1026  | 10/621,404 | July 18, 2003      | Sadaji KATOGI, et al.   | WHEEL SUPPORT<br>BEARING ASSEMBLY  |
| 1761.1027  | 10/033,910 | January 3, 2002    | Michio IIHARA, et al.   | METHOD OF MANUFACTURING OUTER RACES FOR TRIPOD-TYPE CONSTANT VELOCITY UNIVERSAL JOINTS |
| 1761.1028  | 10/317,114 | December 12, 2002  | Koichi OKADA            | VEHICLE MOUNTED<br>BEARING ASSEMBLY  |
| 1761.1029  | 09/838,340 | April 20, 2001     | Kanji NAKAMURA, et al.  | RECYCLE OF<br>GRINDING SLUDGE  |
| 1761.1031  | 09/638,019 | August 15, 2000    | Hisashi OHTSUKI, et al. | SEALING DEVICE FOR A BEARING   |
| 1761.1031D | 10/254,579 | September 26, 2002 | Hisashi OHTSUKI, et al. | SEALING DEVICE FOR A BEARING   |
| 1761.1048  | 10/649,675 | August 28, 2003    | Katsafumi ABE           | ROCKER ARM   |
| 1761.1049  | 10/654,965 | September 5, 2003  | Hisashi OHTSUKI         | WHEEL SUPPORT<br>BEARING ASSEMBLY  |

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Washington, D.D. 20005 Telephone: (202) 434-1512 Facsimile: (202) 434.1501

USPTO Customer No. 21171

## **ASSIGNEE CERTIFICATION**

The undersigned assignee further states that the registered attorneys and/or agents, identified in the new power of attorney above, are empowered and authorized to sign the statement(s) and certification(s) under 37 C.F.R. §3.73(b) on behalf of the assignee. Attached to this power is/are "CERTIFICATE(S) UNDER 37 C.F.R. §3.73(b)".

NTN CORPORATION

Dated November 7, 2003

3-17, Kyomachibori 1-chome Nishi-ku, Osaka-shi, Osaka 550-0003

JAPAN

FEB 2 5 2004

P.O. Box 1450

Honorable Commissioner of Patents and Trademarks

Alexandria, VA 22313-1450

## STATEMENT AND CERTIFICATION UNDER 37 C.F.R. §3.73(b)

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Technology Center 2100

Sir:

This statement hereby certifies that the below-listed patent applications are owned and continue to be owned by the Assignee, NTN CORPORATION, by way of Inventor Assignments identified below:

| DOCKET<br>No. | SERIAL NO. | FILING<br>DATE       | INVENTOR(S)                      | TITLE   | ASSIGNMENT<br>RECORDATION<br>DATE | REEL/FRAME  |
|---------------|------------|----------------------|----------------------------------|---|-----------------------------------|-------------|
| 1761.1001     | 09/944,589 | September<br>4, 2001 | Takayuki<br>NORIMATSU            | WHEEL BEARING<br>ASSEMBLY   | September 4, 2001                 | 012151/0427 |
| 1761.1002     | 09/993,715 | November 27, 2001    | Yoshihisa KUDO,<br>et al.        | WORKSHOP FACILITY DESIGN AND OPERATION SUPPORT SYSTEM ENABLING VERIFICATION OF THE ENTIRE WORKSHOP TO BE PERFORMED EASILY | November 27, 2001                 | 012327/0304 |
| 1761.1003     | 10/300,902 | November<br>21, 2002 | Kazuyoshi<br>HARIMOTO, et<br>al. | CONNECTING ROD AND<br>BEARING-EQUIPPED<br>CONNECTING ROD  | November 21,<br>2002              | 013515/0851 |
| 1761.1004     | 09/880,931 | June 15,<br>2001     | Yasuhiro<br>GOTOU, et al.        | MACHINE COMPONENT<br>MONITORING,<br>DIAGNOSING AND<br>SELLING SYSTEM  | June 15, 2001                     | 011919/0387 |
| 1761.1005     | 09/995,678 | November<br>29, 2001 | Takashi<br>HOSOYA, et al.        | CONSTANT VELOCITY<br>UNIVERSAL JOINT  | November 29,<br>2001              | 012329/0927 |
| 1761.1006     | 10/387,563 | March 14,<br>2003    | Yoshio<br>FUJIKAWA, et al.       | BEARING ASSEMBLY EQUIPPED WITH ROTATION SENSOR CAPABLE OF DETECTING HOME POSITION   | March 14,<br>2003                 | 013867/0861 |
| 1761.1007     | 10/377,755 | March 4,<br>2003     | Kenichi<br>IWAMOTO, et al.       | BEARING ASSEMBLY<br>WITH ELECTRIC<br>POWER GENERATOR  | March 4, 2003                     | 013837/0239 |
| 1761.1008     | 10/382,505 | March 7,<br>2003     | Masatoshi<br>MIZUTANI, et al.    | ROTATION DETECTING DEVICE AND WHEEL SUPPORT BEARING ASSEMBLY USING THE SAME   | N/A                               | N/A         |
| 1761.1009     | 10/299,836 | November<br>20, 2002 | Katsufumi ABE                    | ROCKER ARM  | November 20,<br>2002              | 013511/0973 |
| 1761.1010     | 10/059,249 | January<br>31, 2002  | Masatoshi NIINA                  | SHELL TYPE ROLLER<br>BEARING ASSEMBLY   | January 31,<br>2002               | 012555/0324 |

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| 1761.1011      | 10/098,369 | March 18,<br>2002     | Yasuaki<br>TAKAHASHI, et<br>al. | CAGED ROLLER ASSEMBLY AND REDUCTION GEAR UNIT USING THE SAME                            | March 18,<br>2002                 | 012718/0252 |
| 1761.1012      | 10/634,762 | August 3, 2003        | Masahiko<br>KATAOKA, et al.     | ROCKER ARM  | N/Å                               | N/A         |
| 1761.1013      | 10/382,656 | March 7,<br>2003      | Toru<br>TAKAHASHI, et<br>al.    | ROTATION DETECTING<br>DEVICE AND ANTI-SKID<br>BRAKING SYSTEM<br>USING THE SAME          | March 7, 2003                     | 013864/0240 |
| 1761.1014      | 10/377,757 | March 4,<br>2003      | Hidehiko<br>NISHIJIMA, et al.   | FOIL BEARING AND<br>SPINDLE DEVICE<br>USING THE SAME                                    | N/A                               | N/A         |
| 1761.1015      | 10/090,752 | March 6,<br>2002      | Hisashi<br>OHTSUKI, et al.      | WHEEL SUPPORT BEARING ASSEMBLY  | March 6, 2002                     | 012672/0938 |
| 1761.1016      | 09/972,949 | October<br>10, 2001   | Ryutaro OKA                     | BEARING ASSEMBLY WITH TEMPERATURE SENSOR  | October 10, 2001                  | 012249/0530 |
| 1761.1017      | 10/321,553 | December<br>18, 2002  | Takashi KOIKE,<br>et al.        | SENSOR-EQUIPPED<br>BEARING ASSEMBLY<br>AND MOTOR USING<br>THE SAME                      | December 18,<br>2002              | 013623/0219 |
| 1761.1018      | 10/251,800 | September<br>23, 2002 | Tatsuo<br>NAKAJIMA              | MAGNETIC ENCODER<br>AND WHEEL BEARING<br>ASSEMBLY USING THE<br>SAME                     | September 23,<br>2002             | 013321/0628 |
| 1761.1019      | 10/091,579 | March 7,<br>2002      | Koichi OKADA, et al.            | WHEEL SUPPORT<br>BEARING ASSEMBLY   | October 21,<br>2002               | 013421/0618 |
| 1761.1020      | 10/013,552 | December<br>13, 2001  | Takashi NOZAKI,<br>et al.       | WHEEL SUPPORT ASSEMBLY FOR TRANSMITTING A DRIVE FORCE FROM AN ELECTRIC MOTOR TO A WHEEL | March 22,<br>2002                 | 012712/0321 |
| 1761.1021      | 09/709,390 | November<br>13, 2000  | Hisashi<br>OHTSUKI, et al.      | WHEEL BEARING AND<br>SEALING DEVICE<br>THEREFOR   | November 13,<br>2000              | 011309/0694 |
| 1761.1021<br>D | 10/607,198 | June 27,<br>2003      | Hisashi<br>OHTSUKI, et al.      | WHEEL BEARING AND<br>SEALING DEVICE<br>THEREFOR   | N/A                               | N/A         |
| 1761.1022      | 10/185,015 | July 1,<br>2002       | Kanji<br>NAKAMURA, et<br>al.    | GRINDING SLUDGE<br>COMPACTING MACHINE   | July 1, 2002                      | 013070/0994 |
| 1761.1023      | 10/244,472 | September<br>17, 2002 | Takayuki<br>NORIMATSU           | MAGNETIC ENCODER<br>AND WHEEL BEARING<br>ASSEMBLY USING THE<br>SAME                     | September 17,<br>2002             | 013309/0541 |
| 1761.1024      | 09/989,458 | November<br>21, 2001  | Isamu YOSHIDA,<br>et al.        | POWERED STEERING<br>DEVICE AND BALL<br>SCREW MECHANISM<br>THEREFOR                      | November 21,<br>2001              | 012319/0071 |
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| 1761.1026      | 10/621,404 | July 18,<br>2003      | Sadaji KATOGI,<br>et al.        | WHEEL SUPPORT<br>BEARING ASSEMBLY   | N/A                               | N/A         |

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| 1761.1027      | 10/033,910 | January 3,<br>2002    | Michio IIHARA, et al.        | METHOD OF MANUFACTURING OUTER RACES FOR TRIPOD-TYPE CONSTANT VELOCITY UNIVERSAL JOINTS | January 3,<br>2002                | 012433/0163 |
| 1761.1028      | 10/317,114 | December<br>12, 2002  | Koichi OKADÀ                 | VEHICLE MOUNTED<br>BEARING ASSEMBLY  | December 12,<br>2002              | 013573/0773 |
| 1761.1029      | 09/838,340 | April 20,<br>2001     | Kanji<br>NAKAMURA, et<br>al. | RECYCLE OF<br>GRINDING SLUDGE  | April 20, 2001                    | 011734/0370 |
| 1761.1031      | 09/638,019 | August 15,<br>2000    | Hisashi<br>OHTSUKI, et al.   | SEALING DEVICE FOR A BEARING   | August 14,<br>2000                | 011042/0507 |
| 1761.1031<br>D | 10/254,579 | September<br>26, 2002 | Hisashi<br>OHTSUKI, et al.   | SEALING DEVICE FOR A BEARING   | August 14,<br>2000                | 011042/0507 |
| 1761.1048      | 10/649,675 | August 28,<br>2003    | Katsufumi ABE                | ROCKER ARM   |                                   |             |
| 1761.1049      | 10/654,965 | September 5, 2003     | Hisashi<br>OHTSUKI           | WHEEL SUPPORT<br>BEARING ASSEMBLY  |                                   |             |

If there are any fees associated with the filing of this Statement and Certification, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: November 19, 2003

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